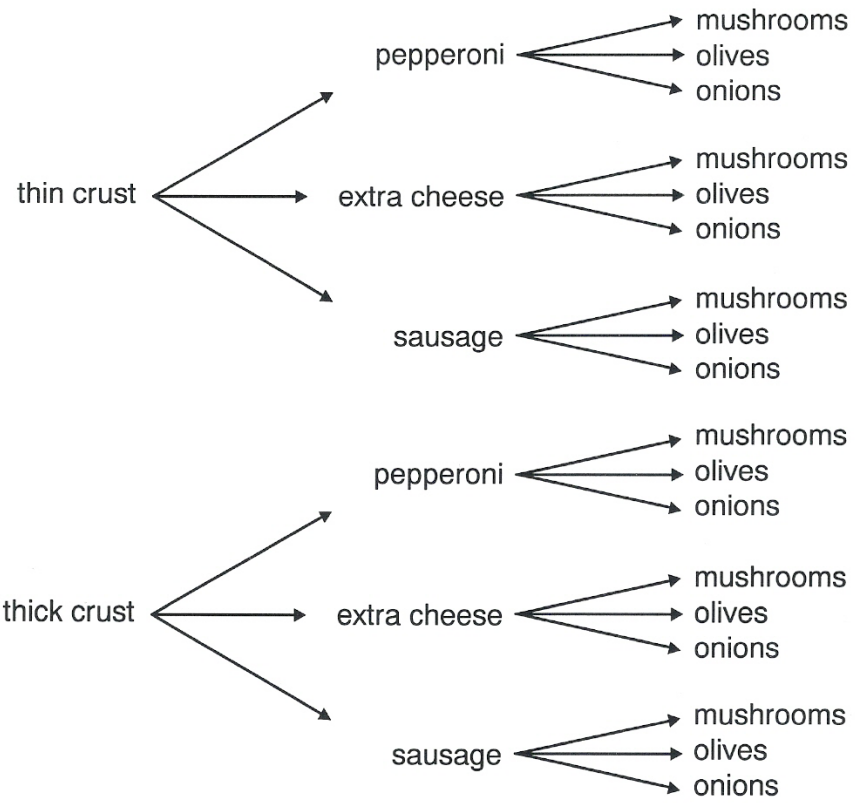
Grade 6

DIVC1: Making a tree diagram or using models, determine the number of possible outcomes in two-stage events.

Key: A ($^1/_{18}$)

The tree diagram below shows the types of pizza with two toppings that can be ordered.



If each pizza order is equally likely, what is the probability that an order will be a thick-crust pizza with pepperoni and mushrooms?

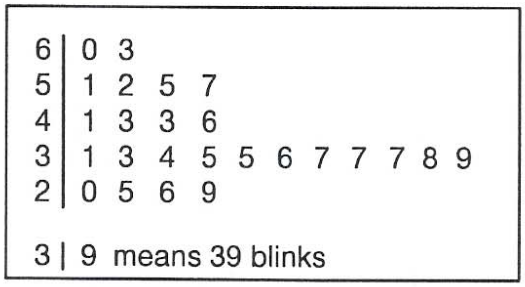
- ◯ $\frac{1}{18}$
- ◯ $\frac{1}{9}$
- ◯ $\frac{1}{6}$
- ◯ $\frac{1}{3}$

Choice analysis:

A. key
B. $3 \times 3 = 9$
C. $3 \times 2 = 6$
D. 3 toppings

Grade 6
DIIA1: Create and solve problems involving the mean, median, mode, and range of a set of data.
DIIB1: Interpret histograms and stem-and-leaf plots
Key: A (37)

A teacher had students in her class count for 15 seconds how many times they blink both eyes. They created the ordered stem-and-leaf plot given below using the data.



What is the mode for blinking?

- ⬭ 37
- ⬭ 38
- ⬭ 40
- ⬭ 43

Choice analysis:

A. Key
B. Number near the center
C. First digit comes from middle number of stem of graph
D. Visually found middle number vertically and horizontally on graph

Grade 6
AIIB1: Write simple equations and inequalities accurately to represent relationships.
Key: B (1500)

Molly had $\frac{2}{3}$ of a yard of material. She used $\frac{1}{4}$ of a yard for a doll dress.

Which equation shows how much material is left?

- ⬭ $\frac{2}{3} \times \frac{1}{4} = \square$
- ⬭ $\frac{2}{3} - \frac{1}{4} = \square$
- ⬭ $1 - \left(\frac{2}{3} \times \frac{1}{4}\right) = \square$
- ⬭ $\frac{2}{3} \div \frac{1}{4} = \square$

Choice analysis:

A. Incorrect operation
B. Key
C. Confuses probability with operations
D. Incorrect operation

Grade 6
AIIA1: Use order of operations to evaluate numerical expressions.
Key: C (30)

Compute the following.

$24 \div 3 + 6 \times 4 - 2$

- ⬭ 20
- ⬭ 28
- ⬭ 30
- ⬭ 54

Choice analysis:

A. $24 \div 3 = 8$, $4 - 2 = 2$, $6 \times 2 = 12$, $8 + 12 = 20$
B. Arithmetic error
C. key
D. all operations left to right